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PTO/SB/01 (12-97)

Approved for use through 9/30/00.OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION				N	Attorney Docket Number 26831-701  First Named Inventor ATANACKOVIC  COMPLETE IF KNOWN			
(37 CFR 1.63)				Application Number	09/924,392			
	Declaration		$\boxtimes$	Declaration Submitted after Initial	Filing Date	08/07/2001		
	with Initial Filing (surcharge		Filing (surcharge	Group Art Unit	2633			
Filing (37 CFR 1.16(e)) required)					Examiner Name	Not Assigned		

As a below named Inventor, I hereby declare that:								
My residence, post office address, and citizenship are as stated below next to my name.								
I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:								
DEVICES WITH OPTICAL GAIN IN SILICON								
(Title of the Invention)								
the specification of which is attached hereto OR    O8/07/2001   as United States Application Number or PCT International								
was filed on (MM/		08/07/2001		States Applica	tion Number of Po	Ji international		
• •	•	s amended on (MM/DD/YYYY						
amended by any amendme	nt specifically r	I understand the contents of t	•			the claims, as		
certificate, or 365(a) of any	y PCT internation	nder 35 U.S.C. 119(a)-(d) or tional application which des tified below, by checking the ving a filing date before that or	ignated at leas box anv foreid	n application	for påtent or inver	Milleu States of I		
Prior Foreign Application	Country	Foreign Filing Date (MM/DD/YYYY)	Prior Not Cla		Certified Cop YES	by Attached?		
Number(s)	Country	(WINDON 1117)			П			
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		F-4-4	Ladadh data ah	oot PTO/SR//	128 attached here	to:		
Additional foreign applic	ation numbers	are listed on a supplementa	priority data si	lication(c) lists	d below			
I hereby claim the benefit us	nder 35 U.S.C.	Filing Date (MM/DD	YYYY)	icadon(3) iiste	d below.			
60/223,874	hereby claim the benefit under 35 U.S.C. 119(h) of any United States provisional application(s) listed below.  Application Number(s) Filing Date (MM/DD/YYYY)  60/223,874 08/08/2000 Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/028 attached hereto.							
•	l l							

(Page 1 of 2)

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.



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## **DECLARATION** — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of the application is not designated in the prior United States or PCT international application in the manner provided by the first paragraph of 31 U.S.C. 112. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

between the filing of	date of t	he prior applicati	on and the na	ational or PC	T internation	al filing o	date of this a	application.		
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	Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/028 attached hereto.  As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the									
Patent and Tradema	ark Office	connected there	with: 🖾 Cu	stomer Numb				——⊳	Pla	ace Customer umber Bar
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☐ Additional regis	Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto									
Direct all correspo	ondence	to: 🛛 Custom or Bar	er Number Code Label		021971		OR 🛛 C	Corresponde	nce a	ddress below
Name	Paul [	Davis								
Address	Wilson	n Sonsini Goodri	ch & Rosati							
Address	650 P	age Mill Road								
City	Palo A	Alto			State	CA	ZIP	94304		
Country	U.S.		Telephone		3-9300		Fax	650-493-68		
I hereby declare the believed to be true punishable by fine application or any p	; and fur or impris	ther that these st sonment, or both,	atements were	e made with t	he knowledd	e that wi	illful false sta	atements and	the li	ke so made are
Name of Sole			- ]		A petition h	as been	filed for th	is unsigned	l inver	ntor
Giver	n Name	(first and middl	e (if any)			F	amily Name	or Surnan	ne	
		Petar B.	10					CKOVIC		
Inventor's Signat	ture	1/	Ham	velue	·-	-		Date	23	Oct 200/
Residence: City		Palo Alto	State	CA	Count	ry	US	Citizensi	nip	AU
Post Office Addre	ess :			•			<del>-</del>			
Post Office Addr	ess	2577 Waverly	Street							
City		Palo Alto	State	CA	ZIP		94301	Country		US
Additional inve	Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto:									

PTO/SB/02A (3-97) Approved for use through 9/30/98,OMB 0651-0032

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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### **DECLARATION**

ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 1 of 1

								<u> </u>		
Name of Additional	Joint Inventor,	if any:		☐ A petition has been filed for this unsigned inventor					inventor	
Given Name	(first and middle (i	f any)		Family Name or Surname						
·	Larry R.						MARS	HALL		
Inventor's Signature	Januar			_				Date	lo	125/01
Residence: City	Mountain View	View State CA Country US			Citizensh	ip	AU			
Post Office Address										
Post Office Address	731 Calderon									
City	Mountain View	State	C,	4	ZIP		94041	Country	•	US
Name of Additional	Joint Inventor,	if any:			A petition h	nas i	been filed for	this unsig	ned	inventor
Given Name	(first and middle (i	f any)	<u> </u>				Family Name	or Surnam	ne	
Inventor's Signature								Date		
City		State			Country		:	Citizenship		
Post Office Address	•									
Post Office Address							1			
City		State			ZiP			· Country ·		
Name of Additional	Joint Inventor,	if any:			A petition has been filed for this unsigned inventor					
Given Name	(first and middle (i	f any)					Family Name	or Surnam	ne	
Inventor's Signature			-			,		Date		
City		State			Country			Citizensh	ip	
Post Office Address										
Post Office Address										
City		State			ZIP		-	Country		

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JANUARY 29, 2002

**PTAS** 

WILSON SONSINI GOODRICH & ROSATI PAUL DAVIS 650 PAGE MILL ROAD PALO ALTO, CA 94304-1050 Under Secretary of Commerce For Intellectual Property and Director of the United States Patent and Trademark Office Washington, DC 20231 www.uspto.gov



\*101908198A\*

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/28/2001

REEL/FRAME: 012341/0222

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ATANACKOVIC, PETAR B.

DOC DATE: 11/23/2001

ASSIGNOR:

MARSHALL, LARRY R.

DOC DATE: 10/25/2001

ASSIGNEE:

TRANSLUCENT PHOTONICS, INC. 952 COMMERCIAL STREET PALO ALTO, CALIFORNIA 94303

SERIAL NUMBER: 09924392

PATENT NUMBER:

FILING DATE: 08/07/2001

ISSUE DATE:

SHARON LATIMER, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

FORM PTO-1595

1-31-92

HOV 2 8 2001

# PATENTS ONLY

12-06-2001

101908198

To the Commissioner of Patents and Trademarks: P	lease record the attached original documents or copy thereof.				
1. Name of conveying party(ies):   1.28.0	2. Name and address of receiving party(ies):				
Petar B. Atanackovic and Larry R. Marshall	Name: Translucent Photonics, Inc.				
Additional name(s) of conveying party(ies) attached?	Street Address: 952 Commercial Street				
Yes 🛛 No					
3. Nature of conveyance:					
Assignment Merger	City/State/Zip: Palo Alto, CA 94303				
☐ Security Agreement ☐ Change of Name ☐ Other	Additional name(s) & address(es) attached?				
	☐ Yes ☒ No				
Execution Date: 10/23/2001 and 10/25/2001					
4. Application number(s) or patent number(s): 1					
If this document is being filed together with a new application					
A. Patent Application No.(s): 09/924,392	B. Patent No.(s):				
	ers attached? Yes No				
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [1]				
Name: Paul Davis Internal Address: FH 1-2 Wilson Sonsini Goodrich & Rosati 650 Page Mill Road Palo Alto, CA 94304-1050	7. Total fee (37 CFR 3.41)				
1 alo Alto, CA 94304-1030	8. Deposit account number: 23-2415 (Attorney Docket No.: 26831-701)				
DO NOT U	SE THIS SPACE				
9. Statement and signature.  To the best of my knowledge and belief, the foregoing info the original document.  Paul Davis	ormation is true and correct and any attached copy is a true copy of				
Name of Person Signing	Signature Date				
Total nur	nber of pages including cover sheet, attachments, and document: [2]				

12/05/2001 DBYRNE 00000188 232415 09924392

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ASSIGNMENT OF APPLICATION	Docket Number 26381-701
Whereas, the undersigned:	. *
1. Atanackovic, Petar B.  Palo Alto, CA  2. Marshall, Larry R.  Mountain View, CA	
hereinafter termed "Inventors", have invented certain new and useful improvements in	
DEVICES WITH OPTICAL GAIN IN SILICON	
	ion No. <u>09/924,392</u>
WHEREAS, <u>Transclucent Photonics</u> , <u>Inc.</u> , having a place of business at <u>952 Commercial Street</u> , <u>Palo A</u> "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of prothereon granted in the United States and foreign countries.	invention disclosed therein, and in and to Inventors (all collectively hereinafter
NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by from said Assignee:	said Inventors to have been received in full
1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee the e said application and said invention; (b) in and to all rights to apply for foreign patents on said invention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any the United States or any foreign country, including each and every application filed and each and every divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to any of said patents.	pursuant to the International Convention y and all patents granted on said invention in patent granted on any application which is a
2. Said Inventors hereby jointly and severally covenant and agree to cooperate with s enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign conventors shall include prompt production of pertinent facts and documents, giving of testimony, executed declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting a patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal procapplications therefor and any patents granted thereon, including without limitation reissues and reexamic cancellation proceedings, priority contests, public use proceedings, infringement actions and court action incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.	countries. Such cooperation by said tion of petitions, oaths, specifications, at Assignee (a) for perfecting in said or filing and prosecuting substitute, applications for reissuance of any said teedings involving said invention and any inations, opposition proceedings,
3. The terms and covenants of this assignment shall inure to the benefit of said Assignment shall be binding upon said Inventors, their respective heirs, legal representatives and	nee, its successors, assigns and other legal d assigns.
4. Said Inventors hereby jointly and severally warrant and represent that they have no assignment, contract, or understanding in conflict herewith.	ot entered and will not enter into any
IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said	1 Assignee as of the dates written below:
Date: 23. Oct 200/ Petar B. ATANACKOVIC	with
Date: Oct , 25, 2001  Larry R. MARSHALL	

Practitioner's Docket No.: 268-1-7c.

# POWER OF ATTORNEY BY ASSIGNEE TO EXCLUSION OF INVENTOR UNDER 37 C.F.R. § 3.71 WITH REVOCATION OF PRIOR POWERS

Attorney N	lame		Reg. No.		ey Name	Reg. No.
Paul Davis	•		29,294		J. Weitz	38,362
David J. Al			39,554		eter Eng	39,666
George A.			41,378 45,145	Shirley	Chen In T. Manson	44,608 43,774
Kenta Suzu John Gilmo			46,375	Keith V		37,475
he followin	g evidentiary doc	uments estab	ish a chain of title		original owner to the	Assignee:
$\boxtimes$			, -	nich Assign		s herewith) forwarded to the
ursuant to 3			on at reel			ments have been reviewed
ursuant to 3	37 C.F.R. § 3.73(t	o) the undersig	gned Assignee here	by states t		ments have been reviewed d ASSIGNEE.
ursuant to 3	37 C.F.R. § 3.73(t	o) the undersig st of ASSIGN	gned Assignee here EE's knowledge ar	by states t	hat evidentiary docu	ments have been reviewed d ASSIGNEE.
ursuant to 3 ereby certif	37 C.F.R. § 3.73(ties that, to the bes	o) the undersignst of ASSIGN	gned Assignee here EE's knowledge ar	by states t	hat evidentiary docu	ments have been reviewed d ASSIGNEE.
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ursuant to 3 ereby certif irect all co fame ddress ddress	Paul Davis Wilson Sonsini	o) the undersigned of ASSIGN telephone cales Goodrich and Road	gned Assignee here EE's knowledge ar ls to:	by states t	that evidentiary docu	d ASSIGNEE.

INFORMATION DISCLOSURE		ATTY. DOCKET NO.	ATTY. DOCKET NO. SERIAL NO.							
is to ver	CITATION	OSCICE	39230-0701	39230-0701 09/924,392						
July 1	PTO-1449		APPLICANT Atanackovic							
Or &	5		FILING DATE 08/07/01	GRO	OUP 2633					
CATENT & TRADENT		U.	S. PATENT DOCUMENTS			<del>-, , -</del> .				
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILIN	G DATE			
6/0	4,613 381	10/21/86	Safe et al.	148	189					
	5,039,190	8/13/91	Blonder et al.	359	341					
7//	5,119,460	6/2/92	Bruce et al.	385	142					
0/1	5,473,174	12/5/95	Ohsawa	· 257	190					
1	5,643,973	6/3/97	Cabral, Jr. et al.	117	95		70 X			
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EXAMINER	1// 1/2		DATE CONSIDERED (	1/03						

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	INFORMATION DISCLOSURE		ATTY. DOCKET NO. SERIAL NO.						
	CITATION		39230-0701	<u> </u>	924,392		<del></del> .		
	PTO-1449		APPLICANT Atanackovic	et al.					
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EXAMINER'S INITIALS	PATÉNT NO.	DATE	NAME	CLASS	SUBCLASS	FİLIN	G DATE		
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			the Quantum effects and Erbium- I-DOPED MATERIALS AND D						
J	epitaxial Structi	ures Obtained l	ve Analysis of Light Emitting Proby MBE Method", GETTERING N MEETING, Sept. 1999, Vol. 6	AND DEFE	CT ENGINEER		:/sub x/		
	Favennec, P.N. JAPANESE JC	et al., "Optical OURNAL OF A	A Activation of ER3+ Implanted in APPLIED PHYSICS, Vol. 29, No	n Silicon By 5. 4, April 19	Oxygen Impurit 90, pp. L524-L5	ies",			
	Si/SiO/sub2/sup	perlattic", THI	of Location and Carrier-Interacti N FILMS FOR OPTICAL WAVI YMPOSIUM, Vol. 597, pp. 29-30	EGUIDE DE			LS		
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EXAMINER	(V) ha	1.	DATE CONSIDERED	403					

EXAMINER: Initial if preference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ATTY. DOCKET NO. SERIAL NO. \*\*\*FQRMATION DISCLOSURE 39230-0701 STATEMENT 09/924,392 APPLICANT Atanackovic et al. AN 2 7 2003 PTO-1449 FILING DATE 08/07/01 GROUP: 2633 & TRADEMA **U.S. PATENT DOCUMENTS EXAMINER'S** PATENT NO. DATE NAME **CLASS SUBCLASS** FILING DATE **INITIALS** 4,959,694 09/25/90 Gell 357 BECEIVED 4,618,381 10/21/86 Sato et al. 148 162.JAN 2 8 2003 5,033,816 07/23/91 Blondeau et al. 350 Technology Center 2600 5,039,190 08/13/91 Blonder et al. 359 5,107,538 04/21/92 Benton et al. 385 5,119,460 06/02/92 Bruce et al. 385 142 2 01/19/93 5,181,211 Burnham et al. 372 5,262,656 11/16/93 Blondeau et al. 257 5,282,260 01/25/94 Buchal et al. 385 132 5,351,146 09/27/94 Chan et al. 359 118 5,355,237 10/11/94 Lang et al. 359 130 5,357,591 10/18/94 Jiang et al. 385 37 FOREIGN PATENT DOCUMENTS EXAMINER'S PATENT NO. DATE **COUNTRY CLASS SUBCLASS** TRANSLATION **INITIALS** YES NO 0 474 447 A1 03/11/92 G02B 6/10 Europe 0 517 440 A2 12/09/92 Europe H01S 3/06 0 578 407 A1 01/12/94 Europe H01S 3/06 П 11 1 215 781 A2 06/12/02 Europe H01S 5/34 П OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Favennec P.N. et al., "Optical Activation of Er3+ Implanted in Silicon By Oxygen Impurities", Jap. Journ. App. Phys. Vol. 29, No. 4, April 1990, pp. 524-526. Han, H.S. et al., "Contol of Location and Carrier-Interaction of Erbium Using Erbium-Doped Si/SiO2 Superlattice", Dep. Phys. Korea Advanced Institute of Sci. and Techn., November 30, 1999, pp. 27-32. Orlov, L.K. et al., "Comparative Analysis of Light Emitting Properties of Si:Er and Ge/Si1-xGex Epitaxial Structure Obtained by MBE Method", Inst. Phys. of Microstructures, (1999) pp. 377-382. Schneider, J. et al., "1.54-µm Luminescence of Erbium-implanted III-V Semiconductors and Silicon", Appl. Phys. Lett. 43(10), 15 November 1983, pp. 943-945. EXÁMINER 03 DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

#### TRANSLATION **EXAMINER'S SUBCLASS** PATENT NO. DATE COUNTRY CLASS **INITIALS** YES NO 5-283743 04/03/92 H01L 33/00 $\Box$ П Japan

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Shin, J.H. et al., "Controlling the Quantum Effects and Erbium-Carrier Interaction Using Si/SiO2 Superlattices", Dept. of Phys. Korea Advanced Institute, January 22, 2001, pp. 142-152.

EXAMINER DATE CONSIDERED 4/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE		ATTY. DOCKET NO. 39230-0701		RIAL NO. 924,392			
1 /	PIO-1449		APPLICANT Atanackovic e		724,392		
I \	· 01		FILING DATE 08/07/01	OUP: 2633			
TRADEMAN		U.S	S. PATENT DOCUMENTS	•			
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILIN	G DATE
	2002/0117673	03/29/62	Moon	257	. 79		
M	2002/0131663	09/19/02	Marks et al.	385	2		
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## Notice of References Cited

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Application/Control No.	A SHOW	Applicant(s)/Patent Under Reexamination		
09/924,392		Reexamination ATANACKOVIC 8	ET AL.	
Examiner		Art Unit		
Jerome Jackson Jr.		2815	Page 1 of 1	

### **U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	· Classification
	А	US-5,363,398	11-1994	Glass et al	372/92
	В	US-			` `
	С	US-			
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### **FOREIGN PATENT DOCUMENTS**

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